Claims

1. The use of a mixture of one or more substances of group
A) lubricin, proteoglycan 4 (PRG4) and phospholipids (SAPL)
with one or more substances of group
B) hyaluronic acid, glycosaminoglycan and derivatives of these substances
dissolved in a solvent,
for the production of an agent for treating defective or degenerated cartilage in vivo.

2. The use according to claim 1, characterized in that the phospholipids are surface active in nature.

3. The use according to claims 1 or 2, characterized in that the hyaluronic acid has a molecular weight of at least 1 x 10^6 Da.

4. The use according to one of the claims 1 to 3, characterized in that the ratio by weight of the substances of group A to the substances of group B ranges from 0.05 to 0.40.

5. The use according to one of the claims 1 to 3, characterized in that the ratio by weight of the substances of group A to the substances of group B ranges from 0.08 to 0.25.

6. The use according to one of the claims 1 to 5, characterized in that the solvent is a Ringer solution, preferably a physiological salt solution.

7. The use according to one of the claims 1 to 6, characterized in that the concentration of the substances of group A in the solvent range from 0.02 to 0.05 % by weight.

8. The use of one of the claims 1 to 7, characterized in that the concentration of the substances of group B in the solvent range from 0.2 to 0.4% by weight.

9. The use of a mixture of one or more substances of group
A) lubricin, proteoglycan 4 (PRG4) and phospholipids (SAPL)
with one or more substances of group
B) hyaluronic acid, glycosaminoglycan and derivatives of the substances
dissolved in a solvent,
for the production of natural cartilage replacement in vitro.

10. Method for the production of a cartilage replacement material for cartilage defects in the joint region using a mixture of claim 9, characterized in that
an open-pored, elastic cell-carrier body is populated in its pores with chondrocytes and
a mixture of claim 9, dissolved in a physiologically acceptable solvent, is brought into contact with the chondrocytes.

11. The method of claim 10, characterized in that the solvent is moved over the cell-carrier body with a laminar flow.

12. The method of claims 10 or 11, characterized in that, by means of a joint-like device, an axial and a rotational force is exerted simultaneously on the cell-carrier body.

13. The method of claim 12, characterized in that the rotation of the joint-like device is carried out about two axes, which are orthogonal to one another.